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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,966	06/22/2001	Bryan K. Ruggles	077056-0341	7669

20686 7590 09/16/2004

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EXAMINER

VANATTA, AMY B

ART UNIT	PAPER NUMBER
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3765

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/887,966

Applicant(s)

RUGGLES ET AL.

Examiner

Amy B. Vanatta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 16-18, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The indicated allowability of claims 1-3, 6-8, and 19 is withdrawn in view of the newly discovered reference(s) to Abler et al and Kinzinger et al. Rejections based on the newly cited reference(s) follow. The delay in the citation of these references is regretted.

Claim Objections

2. Claim 18 is objected to because of the following informalities: The term "used" in line 2 is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3-5, 7, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is confusing since it recites that the tension is removed in the direction substantially *perpendicular* to the pathway, however the step of removing the tension in the perpendicular direction was already recited in claim 1.

Claim 7 is rendered indefinite by the recitation of "the window covering" since this recitation lacks proper antecedent basis. It is noted that claim 8, which depends from claim 7, also recites "the window covering".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Abler et al (US 4,236,286).

Regarding claim 1, Abler et al disclose a method of treating a fabric including a step of providing a fabric having at least three layers; see the disclosed pile fabric of Abler, including a first layer formed by the pile fiber, a second layer formed by the backing (e.g. described in col. 5, lines 15-34), and a third layer formed by the first coating (col. 7, lines 62-68). These layers are "multiple layers of materials", as in claim 16. The fabric is a three-dimensional fabric (due to the upstanding pile as shown in Figs. 11,12, and 14) as in claim 16. Abler discloses feeding the fabric along a pathway, such as shown in Figs. 7-9. Abler discloses a step of applying tension to the fabric in a first direction by means of tenter 32 or 56, and heating the fabric (in oven 26 or 57), as the fabric travels long the pathway (see Figs. 7 and 9 and col. 8, lines 18-29). The

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tension is applied in a direction substantially perpendicular to the pathway (col. 4, lines 25-27 and 37-39, col. 9, lines 3-13; col. 16, lines 32-35; and col. 17, lines 16-22) as in claim 1. A step of removing the tension from the fabric in the first direction is performed as the fabric exits the tenter 32 or 56 (Figs. 7 and 9; and see col. 8, lines 27-29). A tenting frame (32 or 56) is used for applying tension in the transverse (perpendicular) direction as in claims 2 and 18 (see col. 16, lines 32-35 and col. 17, lines 16-22). The tenter also applies tension in the longitudinal direction (parallel to the pathway) as in claims 3 and 17 (col. 16, lines 32-35 and col. 17, lines 16-22). The tension is applied by the tenter 32 or 56 before heating and the tension is removed after heating.

7. Claims 16-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinzinger et al et al (US 2,705,880).

Kinzinger et al disclose a method of treating a fabric including a step of providing a three dimensional fabric (see Figs. 1-3 and 5) comprising multiple layers of materials (see pile layer 11 and base fabric layer 10). Kinzinger discloses feeding the fabric along a pathway, such as shown in Fig. 4. Kinzinger discloses a step of applying tension to the fabric in a first direction (see lateral stretching provided by divergence of belts 16,17; col. 2, lines 43-52) and heating the fabric (in oven 25), as the fabric travels long the pathway. A step of removing the tension from the fabric in the first direction is performed as the fabric exits the tenter frame (shown on the right in Fig. 4). A step of tensioning the fabric in a second direction perpendicular to the first direction (i.e. in the longitudinal direction) is also disclosed; see col. 2, lines 52-53. This tension is removed

as the fabric exits the tenter frame (shown on the right in Fig. 4). A tentering frame is used for applying tension in the first (lateral) direction as in claim 18 (see col. 2, line 36). Regarding claim 20, a step of carrying the fabric along at least a portion of the pathway via a conveyor belt is disclosed; see belts 16,17 and col. 2, line 37.

8. Claims 16-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Christie et al (US 3,149,003).

Christie et al disclose a method including the steps of providing a three dimensional fabric (tubular fabric 14) comprising multiple layers of materials (see top layer 14a and bottom layer 14b of the tubular fabric). Christie discloses a step of feeding the fabric along a pathway and tensioning the fabric in a first direction (i.e. the transverse direction; col. 5, lines 9-12 and col. 4, lines 70-73). A step of applying heat to the fabric as the fabric travels along the pathway is also disclosed (col. 8, lines 58-66). A step of removing the tension from the fabric in the first direction is disclosed (the tension is removed when the fabric is no longer engaged by the tenter pins; see col. 6, lines 21-27). The method includes steps of tensioning the fabric in a second direction (i.e. the longitudinal direction, by means of rolls 10,12; col. 4, lines 66-69) and removing the tension in the second direction (by moving rolls 10,12 together and removing the fabric from the rolls). A tentering frame is used for tensioning the fabric in the first direction (col. 5, lines 9-37) as in claim 18. The endless tenter chains 62,64 form endless belts which are conveyor belts to the extent recited in claim 20, and these belts carry the fabric along at least a portion of the pathway as claimed.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 6-8 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abler et al (US 4,236,286) in view of Dreyfus (US 2,034,716).

Abler et al discloses a method as claimed, but does not disclose the details of the type of tentering system used for tensioning the fabric. Abler merely teaches that a tenter frame "or the like" may be used, preferably of the type which operate continuously (col. 4, lines 40-46). Regarding claim 21, Abler discloses a step of providing a three-dimensional fabric (see pile fabric) comprising multiple materials (col. 4, line 47 through col. 5, line 34). Abler discloses feeding the fabric along a pathway, such as shown in Figs. 7-9. Abler discloses a step of applying tension to the fabric in a first direction by means of tenter 32 or 56, and heating the fabric (in oven 26 or 57), as the fabric travels long the pathway (see Figs. 7 and 9 and col. 8, lines 18-29). The tension is applied in a direction substantially perpendicular to the pathway (col. 4, lines 25-27 and 37-39, col. 9, lines 3-13; col. 16, lines 32-35; and col. 17, lines 16-22). A step of removing the tension from the fabric in the first direction is performed as the fabric exits the tenter 32 or 56 (Figs. 7 and 9; and see col. 8, lines 27-29). The tenter also applies tension in a second direction, i.e. the longitudinal direction (parallel to the pathway) as in claim 21 (col. 16, lines 32-35 and col. 17, lines 16-22).

Thus, Abler does not disclose the tensioning means as comprising a nip system as in claims 6-8 and 21. Such a nip system is conventionally used in the art for tensioning webs, however, as shown by Dreyfus. Dreyfus discloses a tentering type of apparatus used in a method of tensioning a web. The tensioning step is performed by a nip system (see nips formed by rolls 14 in Fig. 1). The rolls 14 ("nip system" or "nip units") are used for applying tension to the web in the longitudinal direction (i.e. parallel to the pathway) as in claim 6 (pg 3, col. 2, lines 34-44). The nip system includes a plurality of nips (rolls 14) along the pathway as in claim 7. Regarding claim 8, the embodiment of Fig. 4 shows the nip system as comprising nips between pairs of bands and rollers (20,21,23; pg 3, col. 2, lines 53-58). Rollers 21 form a nip and rolls 23 form a nip (see Fig. 5), thus forming a plurality of nips as in claim 7. In this embodiment, the web is carried along the pathway with a drive belt assembly (see belt 20) to the extent recited in claim 8. One having routine skill in the art would recognize that such a nip system could be used as the tensioning systems 32,56 of Abler for tensioning the web and would be advantageous in that the web edges would be firmly held without damage; that is, the web would be tensioned without penetrating the web with pins or damaging the web with clamps or clips. It is noted that pins, clamps, or clips are the other means commonly used to grasp the edges of webs for tentering. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a nip system, such as that of Dreyfus, for tensioning the fabric web in the method of Abler et al, in order to firmly hold the edges of the web during tensioning without damaging or penetrating the edges of the web.

Response to Arguments

11. Applicant's arguments filed 5/13/04 have been fully considered but they are not persuasive. Applicant states that claim 16 defines over Christie for the same reasons that claim 1 is allowable, that is, since the prior art does not disclose the method as being performed on a material having at least three layers. It is noted, however, that claim 16 does not require at least three layers. It merely requires "multiple layers", which the material of Christie has, since the fabric of Christie has two layers (a top layer 14a and a bottom layer 14b).

Allowable Subject Matter

12. Claims 4 and 5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy B. Vanatta whose telephone number is 703-308-2939. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on 703-305-1025. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.


Amy B. Vanatta
Primary Examiner
Art Unit 3765

abv
September 13, 2004